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REMARKS

Claim Rejections – 35 USC 102, 103

Regarding claims 1-21, Applicants respectfully disagree with the Examiner's arguments. Applicants respectfully point out that US Patent Application Publication 2004/0029620 (herein referred to as Karaoguz) does not teach the signals and functions expressly stated in the claims themselves, and in fact Karaoguz teaches away from the claimed invention.

Paragraphs 42-46 of Karaoguz teach a power control module 150 that knows the settling time for each element, so the power control module 150 knows whether or not there's time to power each element down. (Specifically, see Karaoguz, paragraph 44). Thus the power control module 150 taught by Karaoguz has no signals as used in the claim language of the present invention. For example, Karaoguz has no "first response signal" indicating that the first module is ready to enter the first low power mode. Karaoguz instead requires that the power control module 150 know ahead of time what the "known settle time" for each element is. The approach taught by Karaoguz may be inferior to the approach taught by the claimed invention for many applications. For example, if there is considerable variation in the "settle time" for a particular element due to manufacturing variations (e.g. elements manufactured in different factories), the approach taught by Karaoguz may require that the worst case settle time be used for all versions of that particular element in order to ensure that slower versions of that element (due to differences in manufacturing) are not powered down too soon and thus malfunction. The exchange of handshake signals used in the claimed invention to and from the modules to enable low power features allows the "settle time" for a module to remain variable, and thus the settle time does not have to be "known". This feature of the claimed invention may be a significant advantage for some applications. In addition, for some application, it is not even possible to know the "settle time": for example if the settle time is a function of software as well as hardware and the software is not yet determined.

In the paragraphs below, if Applicants have misinterpreted or misstated the Examiner's arguments, Applicants respectfully apologize and request clarification from the Examiner.

As to the specific claim language itself, Applicants respectfully point out that the signals illustrated in FIG. 6 of Karaoguz do not have the functions expressly stated in the claims. For example, the Examiner argues that the second portion 196 of the medium access control (MAC)

module 162 and the power control module 150 (see Karaoguz, paragraph 43 and FIG. 6) teach “providing a first power control mode indicator to a first power control stage, said first power control mode indicator selecting a first power mode”. Applicants respectfully assert that the inactivity period signal is the only signal in FIG. 6 provided from 196 to 150 (see Karaoguz, paragraph 46, lines 5-7). Thus the Examiner is asserting that the power control module 150 of Karaoguz maps to the first power control stage of the claimed invention, and the inactivity period signal of Karaoguz map to the first power control mode indicator of the claimed invention. The claim language then states “receiving a trigger input signal at said first power control stage triggering at least a first module to enter said first low power mode”. According to the Examiner’s mapping, the power control module 150 of Karaoguz must receive “a trigger input signal”. But the power control module 150 of Karaoguz receives only one input (i.e. the inactivity period signal from 196 to 150), and the Examiner has already mapped that one input as the “first power control mode indicator” of the claimed invention. So Karaoguz does not teach “a trigger input signal”. Thus the power control module 150 as taught by Karaoguz does not teach the signals and functionality of the claimed invention. In addition, Applicants respectfully point out that the inactivity period signal provided from 196 to 150 as taught in FIG. 6 and the associated text of Karaoguz teaches merely an inactivity period signal representing the duration of the time period of inactivity, not the functionality of the signals of the claimed invention.

In addition, the claimed invention has “a first request signal” which requests “said first module to enter said first low power mode based on said trigger input signal”, “a first response signal indicating that said first module is ready to enter said first low power mode”, and “a first control signal” provided “in response to said first response signal, said first control signal enabling low power features corresponding to said first low power mode”. The Examiner asserts that signal 2 in FIG. 6 of Karaoguz teaches “a first request signal”. Since Karaoguz has no “first response signal indicating that said first module is ready to enter said first low power mode”, the Examiner just names the same signal 2 again (power down/power up). But signal 2 (power down/power up) as taught in Karaoguz does not indicate that the first module is ready to enter said first low power mode. As to the “first control signal” provided “in response to said first response signal, said first control signal enabling low power features corresponding to said first low power mode” of the claimed invention, the Examiner merely cites paragraphs 42-46 of

Karaoguz without citing any signal in FIG. 6 as having this functionality. Applicants respectfully assert that Karaoguz does not teach the "first control signal" at all.

Applicants respectfully assert that Karaoguz teaches away from the present invention by requiring that power control module 150 know the settle time for each transceiver element so that the power control module 150 can send power down/power up signals to each element without having to have any type of handshake mechanism with the element. Karaoguz does not teach the signals and their functionality as expressly stated in the claim language. In addition to the fact that the approach taught by Karaoguz is different and teaches away from the claimed invention, there are some significant drawbacks to the approach taught by Karaoguz as compared to the claimed invention.

If the Examiner maintains his rejection of the claims under Karaoguz in the next Office Action, Applicants respectfully request that the Examiner cite which signal in FIG. 6 has the functionality of each signal in the claimed invention so that Applicants are clear as to the Examiner's arguments and can more accurately respond.

The dependent claims are allowable for at least the reasons given above.

The Office Action contains numerous statements characterizing the claims, the Specification, and the prior art. Regardless of whether such statements were addressed by Applicants, Applicants refuse to subscribe to any of these statements, unless expressly indicated by Applicants.


Applicants believe the application is in condition for allowance which action is respectfully solicited. Please contact Susan C. Hill if there are any issues regarding this communication or the current Application.

Respectfully submitted,

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